ALGEBRA REVIEW AND WORKOUT

Design, Scope, and Pedagogical Method

A documentary account of a rigorous, calculator-free course in symbolic fluency for college mathematics and SAT preparation

Eight chapters • 53 worked examples • 170 exercise sets
967 separately enumerated tasks • complete solutions

Maksim Sokolov
Author
Toronto, Canada • 2026

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Algebra Review and Workout: Design, Scope, and Pedagogical Method

A documentary account of the book *Algebra Review and Workout: Rigorous Preparation for College Mathematics and SAT Algebra*

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SOURCE AND VERIFICATION NOTE

Bibliographic facts, chapter descriptions, page ranges, example counts, exercise counts, and solution counts were checked against the supplied book. The verified edition contains eight preliminary pages and 368 numbered pages. The external description of the current SAT mathematics domains is based on the official College Board pages cited at the end of this article.

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Project overview

Abstract

Algebra Review and Workout: Rigorous Preparation for College Mathematics and SAT Algebra is a depth-first course in elementary algebra by Maksim Sokolov. It is organized around a specific instructional claim: students cannot solve equations and inequalities reliably unless the manipulation of expressions has become reliable. The book therefore begins with six chapters on the machinery of expressions and then applies the same machinery in substantial chapters on equations and inequalities.

The completed book contains eight preliminary pages and 368 numbered pages, including eight chapters, 53 worked examples, 170 numbered exercise sets, 967 separately enumerated tasks, 170 corresponding full-solution entries, and a four-page index. Its exercises progress from direct evaluation to nested radicals, polynomial composition, factorials, finite sums and products, binomial coefficients, parameter-dependent equations, and sign analysis. The book is calculator-free by design. It presents itself not as a comprehensive survey or a test-taking manual, but as sustained preparation in the symbolic control that later quantitative work presupposes.

PUBLICATION FACT	SOURCE-VERIFIED DESCRIPTION
Title	*Algebra Review and Workout: Rigorous Preparation for College Mathematics and SAT Algebra*
Author	Maksim Sokolov, Professor of Mathematics, Seneca Polytechnic, Toronto, Canada
Publication	Maxergon School, Toronto, 2026
ISBN	978-1-0679668-6-7
Physical design	8 by 10 inches, 12-point source layout, two-sided textbook format
Course structure	Eight chapters, each containing explanation, worked examples, exercises, and an answer key; eight full-solution chapters follow
Primary purpose	Rigorous practice in evaluating and transforming expressions and solving real equations and inequalities
Explicit boundaries	Not a complete survey of elementary algebra; complex numbers and systems of equations are outside its scope

Table 1: *The book at a glance.*

Why a book about algebraic fluency?

The opening sentence calls elementary algebra “the language in which all basic quantitative problems are expressed, transformed, and solved.” The point is not that algebra is the whole of mathematics. It is that a student who must struggle with each elementary transformation has less attention available for the new ideas in calculus, linear algebra, probability, statistics, economics, or any other symbolic subject.

This emphasis is consistent with the broader idea of procedural fluency in mathematics: procedures should be carried out accurately, efficiently, flexibly, and with an understanding of when they apply. The National Research Council described procedural fluency as one of five interdependent strands of mathematical proficiency, alongside conceptual understanding, strategic competence, adaptive reasoning, and productive disposition.[1]

The book's answer is sustained, cumulative practice. It starts with arithmetic substitution and evaluation, then introduces transformations only as their use becomes necessary. Later exercises deliberately combine techniques from several chapters. The resulting difficulty is not based on obscure theory; it arises from the need to maintain accuracy across a long symbolic chain.

From a focused expressions course to an eight-chapter course

The first six chapters cover the ground of an earlier, more limited work, *A Serious Student's Guide to Algebraic Expressions*. The present book is not identified as a new edition of that work. It is a larger course with a new architecture and two substantial additions: algebraic equations and algebraic inequalities.

This extension follows a mathematical dependency. An equation cannot be solved reliably if its two sides cannot be transformed reliably. An inequality adds a further demand: operations must be controlled not only algebraically but also with respect to order, sign, excluded values, and equivalence. The course therefore moves from expressions to equations and then to inequalities, with each stage reusing the vocabulary and methods developed before it.

The concentration is deliberate. The book does not attempt to include every topic traditionally placed under elementary algebra. Its stated aim is depth in the central real-algebra skills: reading, evaluating, transforming, factoring, and simplifying expressions, then solving the principal families of equations and inequalities with explicit attention to domain and logical validity.

[1] National Research Council, *Adding It Up: Helping Children Learn Mathematics* (Washington, DC: National Academies Press, 2001), doi:10.17226/9822.

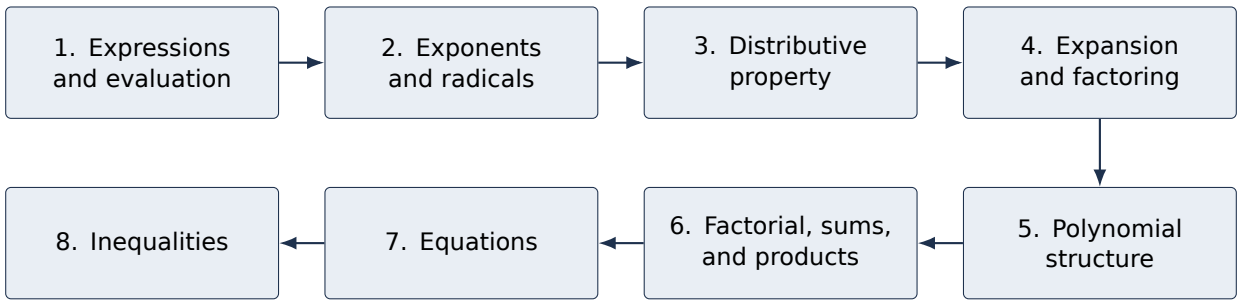
Architecture of the course

The eight-chapter progression

The course is cumulative. Chapter 1 supplies the language of expressions; Chapters 2–6 enlarge the available symbolic machinery; Chapters 7 and 8 use that machinery in the two principal problem-solving settings.

CH.	TITLE	PRINCIPAL DEVELOPMENT
1	Mathematical expressions	Variables, constants, coefficients, domains, composite expressions, evaluation, and elementary mathematical models.
2	Exponents and radicals	Whole, negative, fractional, and decimal exponents; principal roots; conversion between powers and radicals; nested forms.
3	Distributive property	Like terms, expansion, factoring out, algebraic fractions, and preservation of domain restrictions.
4	Expansion and factoring	Squares and cubes of sums and differences, difference of squares, sum and difference of cubes, and sustained simplification.
5	Working with polynomials	Classification, long division, remainder and quotient, composition, noncommutativity, one-sided distributivity, and iterative powers.
6	Factorial, sigma, and product notations	Finite sums and products, progressions, means, variance, standard deviation, Euclidean distance, permutations, combinations, and the binomial theorem.
7	Algebraic equations	Linear, literal, polynomial, quadratic, rational, and radical equations; identities, contradictions, domains, extraneous solutions, substitution, and factor methods.
8	Algebraic inequalities	Order principles, intervals, number-line graphs, sign charts, absolute-value, polynomial, rational, radical, compound, and parameter-dependent inequalities.

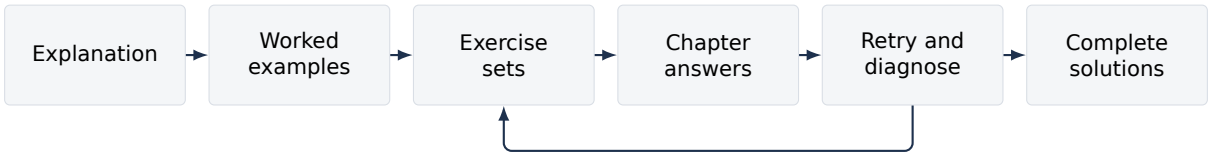
Table 2: *The complete chapter sequence.*



A continuous course: each later stage reuses the earlier symbolic machinery.

The pedagogical engine

Every chapter follows the same internal sequence. The repetition of that architecture is intentional: students always know whether they are learning a method, seeing it used, attempting it independently, checking the result, or studying a complete solution.



The chapter answer key is deliberately separated from the full solutions. The recommended procedure is to attempt a set, compare the final answer, return to the relevant explanation when the answer is wrong, and consult the complete solution only after a serious second attempt. Even after a correct answer, the solution may reveal a shorter or structurally stronger route.

Measured scope

The quantitative structure helps explain the book's emphasis. The main course, including concise chapter answers, occupies numbered pages 1–170. Full solutions occupy pages 171–363, a longer block than the course text itself. The index occupies pages 365–368.

MEASURED COMPONENT	COUNT OR EXTENT
Book extent	viii + 368 numbered pages
Chapters	8
Worked examples	53
Numbered exercise sets	170
Separately enumerated tasks	967
Full-solution entries	170
Instructional chapters and answer keys	pp. 1–170
Detailed solutions	pp. 171–363
Index	pp. 365–368

Table 3: *Counts verified directly from the book. A lettered subpart and an unpartitioned exercise are each counted as one separately enumerated task.*

The total of 967 tasks is not intended as a spectacle of size. The exercises are deliberately weighted: short work builds fluency in foundational operations, while longer multipart problems appear only after their component skills have been established. The collection is therefore neither an inflated problem bank nor a sample too small to secure mastery. It is substantial but manageable, calibrated so that a serious student can complete every set and acquire strong, durable skills. Each of the 170 numbered sets has a corresponding full-solution entry.

Representative mathematics

The following selections are not a substitute for the course. They document the range of symbolic forms and the transition from calculation to structure. The notation and problem statements are reproduced from the book with only local typographic adaptation.

Where the progression begins

The book does not begin at an advanced level or confront the reader immediately with capstones. Each chapter starts with accessible, focused work and develops the necessary skills in measured steps. Earlier ideas then return in progressively more demanding forms: notation changes, structures become nested, and techniques learned separately are combined. By repeatedly rotating familiar ideas into new settings, the course teaches students to recognize and use them even when a problem no longer resembles the original model. This controlled ascent leads first to a capstone near the end of each chapter and ultimately to the cumulative equation and inequality work at the end of the book. The six selections below show the elementary starting points from which the later examples are built.

1. Substitute and evaluate (Ch. 1)

For $x = 2$, $y = 5$, $A = 5$, and $m = -1$:

$$4xy + A(m-2) = 4 \cdot 2 \cdot 5 + 5(-1-2) = \boxed{25}.$$

2. Apply exponent laws (Ch. 2)

$$(2z)^4 - 16(z^2)^2 = 16z^4 - 16z^4 = \boxed{0}.$$

3. Distribute and simplify (Ch. 3)

$$-3x^2(x^3 - 2x) = \boxed{-3x^5 + 6x^3}.$$

4. Factor a quadratic (Ch. 4)

$$k^2 - k - 6 = k^2 + 2k - 3k - 6 = \boxed{(k+2)(k-3)}.$$

5. Solve a linear equation (Ch. 7)

$$3(2x-5) - 2(x+1) = x + 7,$$

$$4x - 17 = x + 7 \Longrightarrow \boxed{x = 8}.$$

6. Solve a linear inequality (Ch. 8)

$$5 - 2(3x+1) < 4x + 13,$$

$$-10x < 10 \Longrightarrow x > -1, \quad \boxed{x \in (-1, \infty)}.$$

These are intentionally modest beginnings. Substitution, exponent laws, distribution, and factoring establish the transformations; equations and inequalities then reuse them while adding equivalence, checking, and sign control. The later capstones are demanding because they coordinate familiar moves across longer symbolic chains, not because the course makes an abrupt jump in level.

Nested structure and generalization

A. Nested radicals, powers, and factorial structure (Exercise 2.18)

For $n = 6$, $m = 7$, $\alpha = 64$, and $\beta = 2$, simplify and evaluate

$$\left(\sqrt{\sqrt[3]{\sqrt[4]{\cdots \sqrt[n]{\alpha}}}}\right)^{(n-1)!} + \sqrt[(m-1)!]{\left(\left((\beta^2)^3\right)^4 \cdots\right)^m}.$$

The expression makes a basic point in a deliberately demanding form: nested roots, iterated powers, and factorial exponents can all be reduced by the same laws of exponents when the structure is read correctly.

B. A finite-sum formula obtained by symmetry (Exercise 3.20)

Let

$$A = 1 + 2 + 3 + \cdots + n.$$

Writing the same sum in reverse and adding term by term gives

$$\begin{aligned} A &= 1 + 2 + 3 + \cdots + (n-1) + n, \\ A &= n + (n-1) + (n-2) + \cdots + 2 + 1, \\ \hline 2A &= (n+1) + (n+1) + \cdots + (n+1) = n(n+1). \end{aligned}$$

Hence

$$1 + 2 + \cdots + n = \frac{n(n+1)}{2}.$$

Here distributive algebra becomes a tool for deriving a general identity, not only for collecting terms in a fixed expression.

C. Polynomial composition treated as an algebraic operation (Exercise 5.19)

The exercise first asks for the identity polynomial E satisfying

$$A \circ E = E \circ A = A$$

for every one-variable polynomial A. It then defines, when the indicated iterative roots and inverses exist,

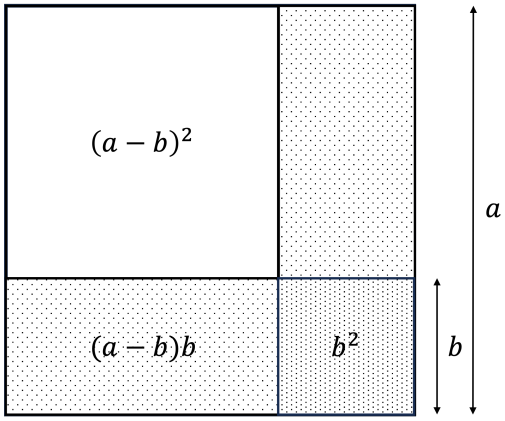
$$A^{\circ m/n} = \left(\sqrt[\circ n]{A}\right)^{\circ m},$$

and asks the student to simplify

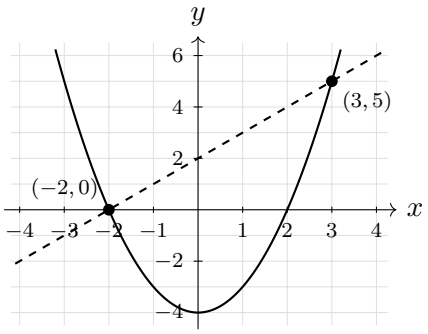
$$(8x + 7)^{\circ 2/3} + (27x + 13)^{\circ(-1/3)}.$$

The task extends familiar ideas—identity, inverse, powers, and roots—to a different operation and forces the student to distinguish analogy from proof.

Geometry and exact equation solving



D. Area interpretation of $(a-b)^2 = a^2 - 2ab + b^2$ for $a \geq b \geq 0$ (Chapter 4).



E. The solutions of $x^2 - 4 = x + 2$ are the x-coordinates -2 and 3 of the graph intersections (Chapter 7).

Figure 1: *Two visual bridges between algebraic identities and geometric meaning.*

The book does not replace exact algebra with graphs. The graph explains what a solution means; factorization establishes the exact values:

$$x^2 - 4 = x + 2 \iff x^2 - x - 6 = 0 \iff (x+2)(x-3) = 0 \iff x \in \{-2, 3\}.$$

Cumulative capstones

F. Double factorial, a binomial sum, and an indexed product (Exercise 7.20)

For a positive integer n, define

$$D_n = \frac{(2n)!!(2n-1)!!}{(2n)!}, \qquad F_n(x) = D_n \sum_{k=0}^{n} C_k^n x^{n-k},$$

and

$$G_n(x) = \prod_{j=1}^{n} \left(F_n(x) - j^n\right).$$

The first reduction is structural:

$$D_n = 1, \qquad F_n(x) = \sum_{k=0}^{n} C_k^n x^{n-k} = (x+1)^n.$$

The remaining parts ask for odd and even cases, particular values of n, the sum of distinct real solutions, and related product equations. The capstone therefore joins the factorial, binomial, polynomial, and equation material of several chapters.

G. Integer inequalities across several notational systems (Exercise 8.18)

For a positive integer n (with $n \geq 2$ where needed), solve:

$$\sum_{k=1}^{n} k < 55, \qquad \sum_{k=1}^{n} k^2 \leq 91,$$
$$\sum_{k=1}^{n} k^3 > 225, \qquad \sum_{k=0}^{n-1} 2^k \geq 63,$$
$$\frac{(n+2)!}{n!} \leq 72, \qquad \frac{(2n)!!}{(2n-2)!!} > 10,$$
$$C_2^n < 45, \qquad \frac{(n+1)!}{(n-1)!} - 2C_2^n \geq 14.$$

The display is compact, but the task is cumulative: each inequality first requires the student to recover the appropriate algebraic form from earlier chapters and only then analyze the integer solution set.

H. An indexed-product inequality built from the binomial theorem (Exercise 8.20)

After using the binomial theorem to reduce $F_n(x) = \sum_{k=0}^{n} C_k^n x^{n-k}$ to $(x+1)^n$, the exercise asks for sign analysis of indexed products for odd and even n. One later part is

$$\prod_{j=1}^{6} \left((x+1)^2 - j^2\right) < 0.$$

Notation introduced in Chapter 6, equations developed in Chapter 7, and sign charts from Chapter 8 are used in one final problem family.

Positioning and use

College preparation without pretending to be college mathematics

The subtitle's phrase *Preparation for College Mathematics* is a statement about prerequisite fluency, not a claim that this is a calculus, linear algebra, probability, or statistics text. Those subjects appear only as destinations and occasional sources of notation or applications. The book prepares for them by making the elementary symbolic layer less fragile.

This distinction also explains the calculator-free design. The exercises are not intended to test whether a device can evaluate an expression or solve an equation. They require the student to expose structure on paper, control signs and domains, and explain the chain of transformations. A calculator may confirm a numerical value, but it cannot replace the intended practice.

Relationship to the current SAT mathematics domains

The College Board currently organizes SAT mathematics into four domains: Algebra, Advanced Math, Problem-Solving and Data Analysis, and Geometry and Trigonometry. Its Algebra domain emphasizes linear equations and inequalities, linear functions, and systems; its Advanced Math domain includes equivalent expressions and nonlinear equations and functions, including polynomial, rational, radical, and absolute-value forms.[2]

SAT DOMAIN	RELEVANT MATERIAL IN THE BOOK	CORRECT INTERPRETATION
Algebra	Linear equations and inequalities; transformation of expressions; modeling with one unknown	Direct preparation for important skills, but systems of two equations and a full treatment of linear functions are not included.
Advanced Math	Equivalent expressions; exponents and radicals; polynomial, quadratic, rational, radical, and absolute-value equations and inequalities	Strong overlap in symbolic methods and one-variable nonlinear algebra. The book's sustained exercises are not imitations of SAT question format.
Problem-Solving and Data Analysis	Means, variance, standard deviation, progressions, permutations, combinations, and selected applications	Supporting exposure only; the book is not a comprehensive data-analysis or probability course.
Geometry and Trigonometry	A few geometric models and diagrams used to explain algebraic identities or formulate equations	Incidental support, not domain coverage.

Table 4: *The book's relationship to the official SAT mathematics taxonomy.*

[2]College Board, "Algebra" and "Advanced Math," SAT Suite of Assessments, accessed August 2026.

The book expressly does not reproduce the examination's format, teach test-taking strategies, or claim coverage of every SAT topic. Its SAT role is to overprepare the algebraic machinery through longer expressions, varied notation, and cumulative problems, so that shorter examination tasks are less likely to fail because of elementary symbolic errors.

Intended readers

The course is suited to several overlapping groups:

- students entering a college or university quantitative course who need a dependable review of real elementary algebra;
- students preparing for more advanced undergraduate or graduate work who recognize that weak symbolic technique will obstruct harder material;
- high-school students seeking algebra practice beyond the length and notational range of a conventional survey course;
- independent learners and instructors who want a structured source of cumulative exercises with answers and complete solutions;
- SAT candidates who want demanding algebraic conditioning in addition to, not instead of, official format-specific preparation.

The prerequisites are deliberately modest but real: sound arithmetic and a willingness to write out substantial work. The book assumes neither a calculator nor advanced abstraction.

A disciplined method of use

The recommended working cycle is as important as the chapter order:

1. Read the explanation and reconstruct any step that is not automatic.
2. Work through the examples on paper rather than reading them passively.
3. Attempt every exercise set before consulting its full solution.
4. Use the concise chapter answer to detect an error, then retry the problem.
5. Study the full solution after a serious attempt, including when the answer is correct, and compare methods.
6. Keep a record of recurring errors so that a pattern, not merely one answer, is corrected.

This method gives repetition a precise role. Repetition is not included simply to increase volume; it develops automaticity, pattern recognition, endurance, and the ability to preserve logical control over a longer solution.

PART II

The author’s introduction

Reproduced in full from the book, with typography adapted to this article

Introduction

Elementary algebra is the language in which all basic quantitative problems are expressed, transformed, and solved. This book is for students who intend to speak that language fluently.

Algebra Review and Workout: Rigorous Preparation for College Mathematics and SAT Algebra has three governing aims:

- To develop strength in transforming, simplifying, and evaluating algebraic expressions, and then to put that strength to work in equations and inequalities.
- To build mastery through a deliberate sequence of explanations, worked examples, demanding exercises of increasing difficulty, and complete solutions.
- To serve students who are willing to work carefully, persist through "productive struggle," and replace fragile familiarity with dependable skill.

The first six chapters develop the machinery of algebraic expressions. They cover the ground of the earlier six-chapter book, *A Serious Student's Guide to Algebraic Expressions*, which remains available as a separate text for readers who want that more limited course. The present book adds two substantial chapters: one on equations and one on inequalities. These topics were added because expressions, equations, and inequalities belong together at the core of elementary algebra. An equation cannot be solved reliably if its two sides cannot be transformed reliably; an inequality cannot be solved safely without both algebraic control and a clear understanding of order.

This is not an attempt to survey every topic that has ever appeared under the name elementary algebra. Complex numbers and systems of equations, for example, are outside its scope. The aim is *depth* in the central skills: manipulating expressions, solving the principal families of real equations and inequalities, and explaining each step with precision.

This deliberate concentration is not a rejection of breadth but preparation for it. The phrases *College Mathematics* and *SAT Algebra* in the subtitle identify important destinations for that preparation; they do not claim comprehensive coverage of either college mathematics or every topic classified under SAT Algebra. The purpose is to make the central algebraic machinery dependable: reading, transforming, simplifying, and evaluating expressions, and solving equations and inequalities. Students who possess that machinery can approach a broader curriculum or examination with enough fluency to concentrate on new problems rather than on elementary manipulation.

Many conventional textbooks present algebra in small, relatively isolated increments, often through short expressions and a narrow range of notation. Such practice has value, and this book also begins progressively; however, university texts soon require students to read and manipulate larger expressions, unfamiliar letters, nested structures, and summation, product, factorial, and binomial notation without

hesitation. The explanations and exercises here intentionally accustom readers to that complexity. The exposition follows the disciplined style of a university text while remaining concrete and accessible; it does not assume the abstraction or level of rigor of an advanced text.

The depth of coverage in this book goes well beyond that of a typical high-school elementary algebra course, for an important reason: modern university-level quantitative courses—such as linear algebra, calculus, probability, and statistics—assume that algebraic manipulation has become routine. Undergraduate and, to a much higher degree, graduate courses do not pause to repair students' weak elementary algebra; they use algebra while teaching something harder.

For students preparing for advanced or graduate study in a quantitative field, this book is therefore not merely a review. It is important preparation.

The same fluency supports SAT Algebra preparation. This book does not reproduce the examination's format, teach test-taking strategies, or survey every tested topic. Typical SAT preparation emphasizes short, self-contained questions that are less structurally demanding than the sustained problems here. This book deliberately overprepares: longer expressions, varied notation, and cumulative problems develop greater symbolic control and endurance. Students who handle this work should find corresponding SAT Algebra questions comparatively direct and approach them calmly and efficiently— mathematically "battle-hardened" for demands beyond those normally imposed by the examination.

Two prerequisites are essential. The academic prerequisite is a sound command of arithmetic. The practical prerequisite is an ample supply of paper and pens. You will not need a calculator. You will need to write, test, revise, and work through many exercises. Rigorous progress in mathematics comes less from watching a solution than from producing one.

Your journey

The chapters form a continuous course. Later work depends on earlier work, and the exercises increase in difficulty as the necessary tools accumulate.

Chapter 1: You will evaluate expressions of increasing complexity. No techniques for transforming expressions are assumed; your arithmetic skills are put to work and reinforced.

Chapter 2: You will work with whole and fractional exponents and with radicals. By the end of the chapter, you will be able to apply the laws of exponents accurately in expressions of substantial complexity.

Chapter 3: You will master the distributive property, collect like terms, and add and subtract algebraic fractions. These are basic operations, but later success depends on performing them without uncertainty.

Chapter 4: You will use the principal expansion identities and develop techniques for expanding, factoring, and simplifying algebraic expressions. The chapter turns familiar identities into working instruments.

Chapter 5: You will study polynomials, including factoring, division, and composition, and encounter structural ideas such as noncommutativity and one-sided distributivity.

Chapter 6: You will work with factorial, summation, and product notation. Along the way you will meet arithmetic and geometric progressions, means, variance and standard deviation, Euclidean distance, permutations and combinations, and the binomial theorem.

Chapter 7: You will bring the preceding algebraic techniques to bear on equations. You will solve linear, rational, polynomial, radical, and literal equations; distinguish identities from contradictions; and use factoring, substitution, the discriminant, the factor theorem, and Viète's formulas. The final exercises incorporate summation, factorial, binomial-coefficient, and product notation.

Chapter 8: You will extend the same machinery to inequalities. You will study how order behaves under algebraic operations, describe solution sets with interval notation and number-line graphs, and solve linear, compound, absolute-value, polynomial, rational, radical, and parameter-dependent inequalities. The final exercises combine sign charts with polynomial division, composition, summation, binomial-coefficient, and product notation.

Upon completing all eight chapters, you should be able to manipulate expressions and solve equations and inequalities with the accuracy and control expected at the beginning of rigorous postsecondary quantitative study. That foundation will also make later review for advanced and graduate work far more effective.

Your approach to learning

- Seek genuine mastery rather than short-term familiarity.
- Accept that durable knowledge requires sustained effort.
- Work through the material without skipping inconvenient details.
- Value exercises as the place where understanding becomes skill.
- Treat confusion and "productive struggle" as normal parts of growth.
- Analyze errors instead of hiding them or consulting solutions prematurely.
- Replace excuses with a specific action plan for the next attempt.

Your strategy

For each chapter, use the following sequence:

- Read the section titled “Explanation” carefully, writing out steps that are not yet automatic.
- Study the “Examples of worked exercises” on paper. Verify each transition; do not merely read past it.
- Work through every exercise. Check your answer against the answer key at the end of the chapter. If it is incorrect, return to the relevant material and try again before reading the full solution.
- Read the suggested solution after a *serious* attempt, even when your answer is correct. A different route may expose a stronger method.
- Keep a record of recurring errors. Correcting a pattern is more valuable than correcting the same isolated mistake repeatedly.

Some exercises will feel repetitive. That repetition is deliberate. Automaticity and pattern recognition are built through sustained, accurate practice. The object is not to finish the book quickly; it is to become formidable at algebra.

Maksim Sokolov
Toronto, August 2026.

Author and publication record

About the author

Maksim Sokolov is Professor of Mathematics at Seneca Polytechnic in Toronto, Canada. In *Algebra Review and Workout*, the authorial roles include the selection and sequencing of topics, the design of the explanation–example– exercise–solution architecture, the construction of the exercise progression, and the final mathematical and editorial responsibility for the book.

Publication record

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Selected references and source notes

1. Maksim Sokolov, *Algebra Review and Workout: Rigorous Preparation for College Mathematics and SAT Algebra* (Toronto: Maxergon School, 2026), ISBN 978-1-0679668-6-7. The supplied book is the primary source for the bibliographic facts, counts, excerpts, and chapter descriptions in this article.

2. National Research Council, *Adding It Up: Helping Children Learn Mathematics*, ed. Jeremy Kilpatrick, Jane Swafford, and Bradford Findell (Washington, DC: National Academies Press, 2001), doi:10.17226/9822.

3. College Board, “Algebra,” SAT Suite of Assessments, accessed August 2026.

4. College Board, “Advanced Math,” SAT Suite of Assessments, accessed August 2026.

5. Internet Archive Help Center, “Books and Texts: A Basic Guide” and “Uploading: A Basic Guide,” accessed August 2026. These pages document filename, language, metadata, and collection practices for repository text items; they do not constitute an endorsement of this publication.

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